IN THE CLAIMS

Please amend the claims as follows:

1-21 (Canceled)

22. (Currently Amended) A method of coating a metal substrate comprising:

a) applying a coating composition on to at least one surface of the metal substrate to form a coating layer on the surface, wherein the coating composition comprises a film forming component comprising a product formed by reacting a mixture including

i) a carboxy functional polymer, a hydroxy functional polymer, or a mixture thereof, ~~and~~

ii) an epoxy resin; and

iii) a polyvinyl alcohol-containing phenolic resol resin; and

b) heating the coated metal substrate such that the coating layer cures to form a cured film on the substrate surface.

23. (Currently Amended) A composite material comprising a metal substrate having at least one surface covered with a cured film, wherein the cured film is formed by:

a) coating the substrate surface with a coating composition comprising a film-forming component which includes a product formed by reacting a mixture including

i) a carboxy functional polymer, a hydroxy functional polymer, or a mixture thereof, and

ii) an epoxy resin; and

iii) a polyvinyl alcohol-containing ~~alcoholic-containing~~ phenolic resol resin; and

b) heating the coated metal substrate, wherein the coating forms a cured film on the surface.

24-27 (Canceled)

28. (Currently Amended) The material ~~method~~ of claim 23 ~~22~~, wherein the carboxy functional polymer includes a copolymer of at least one ethylenically unsaturated carboxylic acid and at least one copolymerizable nonionic monomer.

29. (Currently Amended) The material ~~method~~ of claim 23 ~~22~~, wherein the carboxy functional polymer is a copolymer of acrylic acid, styrene and ethyl acrylate or a copolymer of methacrylic acid, styrene and ethyl acrylate, or a mixture thereof.

30. (Previously Presented) The method of claim 22, wherein the carboxy functional polymer has an acid number of about 200 to about 530.

31. (Previously Presented) The method of claim 22, wherein the carboxy functional polymer has a glass transition temperature of no more than about 110 degrees C and a weight average molecular weight of about 5,000 to about 30,000.

32. (Previously Presented) The method of claim 22, wherein the epoxy resin includes glycidyl ether of dihydric phenol.

33. (Previously Presented) The method of claim 22, wherein the epoxy resin has an epoxide equivalent weight of about 1,000 to about 5,000.

34. (Previously Presented) The method of claim 22, wherein the epoxy resin is the reaction product of a mixture including aliphatic diacid, aromatic diacid, or a mixture thereof, and glycidyl ether of dihydric phenol.

35. (Previously Presented) The method of claim 22, wherein the polyvinyl alcohol-containing phenolic resol resin is the reaction product of a mixture including: phenolic compound; formaldehyde; and polyvinyl alcoholic compound.

36. (Previously Presented) The method of claim 22, wherein the resol resin comprises about 1 wt. % to about 25 wt. % of the polyvinyl alcoholic compound.

37. (Previously Presented) The method of claim 22, wherein the carboxy or hydroxy functional polymer is prepared by polymerization of an ethylenically unsaturated monomer or monomer blend, wherein the monomer or monomer blend includes at least one monomer containing a carboxylic acid group or at least one monomer containing a hydroxy group, in the presence of the epoxy resin.

38. (Previously Presented) The method of claim 37, wherein the functional polymer is the carboxy functional polymer and includes a copolymer of at least one ethylenically unsaturated carboxylic acid and at least one copolymerizable nonionic monomer.

39. (Previously Presented) The method of claim 38, wherein the ethylenically unsaturated carboxylic acid is acrylic acid, methacrylic acid or a mixture thereof and the nonionic monomer is a lower alkyl acrylate, a lower alkyl methacrylates, a hydroxy alkyl acrylate, a hydroxy alkyl methacrylate, styrene, alkyl-substituted styrene, vinyl acetate, acrylonitrile or a mixture thereof.

40. (Previously Presented) The method of claim 39, wherein the functional polymer is a copolymer of acrylic acid, styrene and ethyl acrylate or a copolymer of methacrylic acid, styrene and ethyl acrylate, or a mixture thereof.

41. (Previously Presented) The method of claim 40, wherein the product comprises a graft copolymer of the epoxy resin.

42. (Previously Presented) The method of claim 37, wherein the product comprises a graft copolymer of the epoxy resin, an ungrafted addition polymer and an ungrafted epoxy resin.

43. (Previously Presented) The material of claim 23, wherein the carboxy functional polymer includes a copolymer of at least one ethylenically unsaturated carboxylic acid and at least one

copolymerizable nonionic monomer, has a glass transition temperature of no more than about 110 degrees C, and has a weight average molecular weight of about 5,000 to about 30,000.

44. (Previously Presented) The material of claim 23, wherein the epoxy resin is the reaction product of a mixture including aliphatic diacid, aromatic diacid, or a mixture thereof, and glycidyl ether of dihydric phenol, and wherein the polyvinyl alcohol-containing phenolic resol resin is the reaction product of a mixture including: phenolic compound; formaldehyde; and polyvinyl alcoholic compound.

45. (Previously Presented) The material of claim 23, wherein the functional polymer is a copolymer of acrylic acid, styrene and ethyl acrylate or a copolymer of methacrylic acid, styrene and ethyl acrylate, or a mixture thereof